



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/657,585	09/08/2000	Wen-Kuan Chen	EM/CHEN/5997	2683

7590 01/18/2005
Bacon & Thomas PLLC
4th Floor
625 Slaters Lane
Alexandria, VA 22314-1176

EXAMINER

LAROSE, COLIN M

ART UNIT PAPER NUMBER

2623

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/657,585	Applicant(s) CHEN, WEN-KUAN	
	Examiner Colin M. LaRose	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5 and 13 is/are rejected.
- 7) ☒ Claim(s) 2 and 6-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6 December 2004 has been entered.

Response to Amendments and Arguments

2. Applicant's amendments to claim 1 have overcome the previous rejections of claim 1 in paragraphs 7 and 9 of the Final Rejection dated 6 August 2004.

Claim Objections

3. Claim 7 is objected to because of the following informalities: "filed" in line 4 should be -- field --. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 2, and 5-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2623

Claim 1 calls for “storing decoded frame data in the frame buffer or the temporary buffer” and then recites that “the temporary buffer is provided to store the other frame data which has not been decoded.” It is unclear whether the temporary buffer is to store only decoded data, only data that has not been decoded, or both.

Applicant is required to correct and/or clarify this apparent inconsistency.

Also, claim 1 call for the bit-stream buffer “being adapted to store bit-stream data” but then refers to “the frame data in the bit-stream buffer.” It is unclear whether “bit-stream data” and “frame data” denote the same data or whether they are different.

Clarification and/or correction are required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

Art Unit: 2623

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1, 5, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,594,315 by Schultz et al. ("Schultz").

Regarding claim 1, Schultz discloses a high-resolution picture decoding device (figure 1), comprising:

a memory device having a bit-stream buffer (buffer 12), a temporary buffer (video frame memory 60), and a frame buffer (8-line buffer 64), the bit-stream buffer being adapted to store bit-stream data from a storage media (i.e. the buffer 12 is adapted to store incoming MPEG data from any source); and

a decoding means for decoding the bit-stream data in the bit-stream buffer (decompressor 62 decodes the bit-stream data from buffer 12, wherein the bit-stream data has been decompressed and recompressed prior to application to the decompressor 62) and storing decoded frame data in the frame buffer (64), such that, when a still picture is to be displayed, the frame buffer stores a part of the frame data that has been decoded and corresponds to the still picture (i.e. the 8-line buffer 64 stores 8 lines of the still picture), and the temporary buffer is provided to store the other frame data which has not been decoded and which is to be decoded in real time as the still picture is being displayed (i.e. the video frame memory 60 stores other frame data that has yet to be decoded), and the decoded frame data in the frame buffer and real-time decoded frame data from the temporary buffer are output for displaying a high-resolution still picture (i.e. the data in both the video frame memory 60 and the 8-line buffer 64 are output for real-time display 72),

wherein the frame data in the bit-stream buffer is represented by multiple macroblock lines after being decoded by the decoding means (i.e. the frame data is an MPEG frame that consists of a plurality of macroblocks), the frame buffer only stores a portion of the macroblock lines that has been decoded (i.e. the 8-line buffer 64 stores only 8 lines of macroblock data) and corresponds to the frame data of the still picture, and the temporary buffer stores at least one other macroblock line to be decoded (i.e. the video frame memory 60 stores at least one macroblock line other than the macroblock lines stored in the 8-line buffer 64).

Regarding claim 5, Schultz discloses the frame buffer stores even numbered macroblock lines that have been decoded and correspond to the frame data of the picture (i.e. 8-line buffer 64 stores some even numbered macroblocks lines after decoding by the decompressor 62).

Regarding claim 13, Schultz discloses a multiplexer (68) which selects the decoded frame data in the frame buffer or the real-time decoded framed data from the temporary buffer to output.

Allowable Subject Matter

8. Claims 2 and 6-12 would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Regarding claim 2, Schultz's temporary buffer 60 has more memory space than his frame buffer 64.

Art Unit: 2623

Regarding claim 6, Schultz's macroblock lines in the temporary buffer 60 are not half the height of those in the frame buffer 64.

Regarding claim 7, Schultz does not disclose decoding even and odd fields of macroblock lines, as claimed, since the data stored in video frame memory to be decoded is in de-interleaved form (see column 6, lines 38-39).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colin M. LaRose whose telephone number is (703) 306-3489. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au, can be reached on (703) 308-6604. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600 Customer Service Office whose telephone number is (703) 306-0377.

CML

Group Art Unit 2623

17 January 2005



VIKKRAM BALI
PRIMARY EXAMINER